

### REMARKS

Applicant appreciates the detailed examination evidenced by the Office Action mailed March 29, 2004 (hereinafter "Office Action"). In response, Applicant has amended independent Claims 1 and 7 to recite "dielectric patterns and the conductive patterns defining respective trenches on respective ones of the conductive patterns, the trenches having a greater width than the conductive patterns" clarifying the claimed subject matter and further highlighting patentable distinctions between the claimed subject matter and the cited U.S. Patent No. 6,372,571 to Kim ("Kim").

As amended, Claim 1 now recites:

An integrated circuit comprising:  
conductive patterns formed on a semiconductor substrate;  
dielectric patterns disposed between the conductive patterns on the substrate, each having a cross-section with an upside-down T shape, the dielectric patterns and the conductive patterns defining respective trenches on respective ones of the conductive patterns, the trenches having a greater width than the conductive patterns;  
a nitride film liner lining the trenches defined by the conductive patterns and the dielectric patterns;  
a dielectric layer on the nitride film liner, filling the trenches; and  
at least one metal contact plug passing through the dielectric layer and the nitride film liner and in contact with at least one of the conductive patterns.

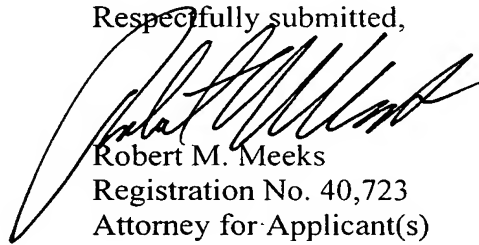
Claim 7 has been similarly amended. As noted by Applicant in response to similar rejections in the Office Action of May 23, 2003 in the parent Application Serial No. 10,172,760 (now U.S. Patent No. 6,710,466), the structures 134 and 122 from Fig. 8 of Kim that the Office Action alleges to correspond to the recited dielectric patterns and conductive patterns (see *Office Action*, p. 3) do not appear to define such trenches. Accordingly, Applicant submits that Kim does not disclose or suggest all of the recitations of either Claim 1 or Claim 7 and, for at least these reasons, Applicant submits that Claims 1 and 7 are patentable over Kim. Applicant further submits that dependent Claims 2-6 and 8-13 are patentable at least by virtue of depending from various ones of independent Claims 1 or 7.

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### **Conclusion**

Applicant submits that the claims, as amended, are patentable over the cited references for at least the reasons discussed above. Accordingly, Applicant submits that the claims are now in condition for allowance, and respectfully requests allowance of the claims and passing of the application to issue in due course. Applicant encourages the Examiner to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,



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### **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 17, 2004.



Candi L. Riggs